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A rights-based analysis of DNA retention: "non-conviction" databases and the liberal state

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Case: [S v United Kingdom \(30562/04\) \(2009\) 48 E.H.R.R. 50 \(ECHR \(Grand Chamber\)\)](#)

***Crim. L.R. 889 Summary:**

This article explores the implications for human rights of retaining a person's DNA when there has been no conviction in the courts. The right to privacy, the presumption of innocence and the interest in not being stigmatised by the State are considered in turn, to determine if they pose a challenge to the retention of an innocent person's genetic material.

Introduction

The collection of DNA (deoxyribonucleic acid) from crime scenes and individuals is seen universally as an intrinsic part of effective criminal investigation and prosecution. The benefits of gathering and comparing DNA samples are manifold: suspects may be more readily and speedily identified, innocent persons may be ruled out and the wrongfully convicted exonerated, while the enhanced likelihood of detection may deter some would-be criminal actors. Despite these factors, across the world there is little consistency legally and theoretically as to whose DNA should be obtained by the State and for how long it should be kept. Ongoing storage of DNA, regardless of the consequence of a specific criminal investigation or prosecution, allows State agents to home in on the population of the DNA repository rather than requiring genetic testing of specific individuals for each police enquiry. In other words, DNA retention provides a potential avenue for investigating or resolving crimes that an individual on the database is yet to commit. Thus, on the face of it, expanding the reach of DNA databases to the greatest degree possible is understandable in an investigative and policing sense, even where this is not predicated on criminal conviction.

The debate about DNA in criminal justice is configured around certain human rights and civil liberties, and while collection of genetic material on the one hand and retention on the other overlap in respect of their consequences they raise slightly different issues. This article will concentrate solely on DNA retention, and in particular on an issue that is difficult to resolve in a rights sense, namely the storage of DNA notwithstanding the results of the relevant investigation or prosecution. Given that suspected but unconvicted individuals lie at the boundary ***Crim. L.R. 890** of what is currently permitted regarding the keeping of genetic material, this group of unconvicted suspects and the policies associated with it represent the focus of this article. Rather than reiterating the science of DNA, the technology of DNA profiling, its significance in criminal investigations, its probative value or associated evidential problems (which have been ably assessed elsewhere¹), here I seek to tease out the human rights implicated by the retention of unconvicted adults' DNA, and to determine the persuasiveness of arguments which contest the legitimacy of this crime control mechanism. I will examine how the retention of DNA of charged and arrested persons has been conceptualised jurisprudentially, as this influences whether, when, and to what extent storage is permitted.

While DNA collection from an individual before a criminal trial is not uncontroversial (it affects the rights to bodily integrity,² to personal privacy³ and the privilege against self-incrimination⁴), this article focuses on retention only. The dominant interpretation of DNA retention is that it compromises the privacy of the individual; however I will show that this right does not provide a barrier to the retention of DNA, especially if further safeguards are introduced regarding the decision to retain. In addition, although it has been suggested that the presumption of innocence may be compromised, I will argue that such analysis is misdirected. Instead of these traditional rationales, I propose a reconsideration of

DNA retention in terms of the State's stigmatisation of an innocent person without due process, which is anathema to liberalist principles. This interest in not being stigmatised has been alluded to tangentially in ECHR case law: here I will elevate it to an argument in its own right, as it represents the strongest and most persuasive challenge to DNA retention where no conviction follows.

***Crim. L.R. 891 The right to privacy**

The right to privacy is that most often cited in relation to DNA retention, given the potential effects on both personal and informational privacy.⁵ Personal privacy is relevant due to the exceptional nature of the genetic material in DNA which determines physical characteristics and traits, genetic disorders, susceptibility to disease and ethnic origin. An individual's DNA is unique (except in the case of identical twins) and is inherited from both one's parents. As more similarities may be seen in the DNA of siblings and family members when compared with unrelated persons, DNA may reveal familial relationships. Thus, a DNA sample contains a range of intimate personal and family information. In contrast, a DNA profile, which may be generated from a sample, is a set of identifying characteristics from regions of DNA that are not known to provide for any physical characteristics or medical conditions of the person. Moreover, a profile's code may only be read with the aid of technology. While the storage and use of a DNA profile rather than a DNA sample may mitigate the impact on personal privacy, both forms affect the right to informational privacy, which is the right to retain control or at least oversight of data or material taken from or relating to oneself.

Judicial assessment of whether and how non-conviction⁶ DNA retention impinges on the right to privacy involves consideration of the populations whose DNA may be kept, the length of time for which this may last, the nature of DNA when compared with other methods of identification such as fingerprints, the distinction between DNA samples and profiles, and the governance of DNA databases.

The effect of DNA retention on privacy has been judged partly by the categories of people whose DNA may be retained--the more expansive the reach of the database, the more likely it is to breach the right. Keeping the genetic material of convicted persons has been approved by the European Court of Human Rights (ECtHR) and US courts,⁷ but the situation concerning unconvicted persons is less clear cut. *S and Marper v United Kingdom* explored the extent to which such DNA retention affects the right to privacy under art.8 of the European Convention on Human Rights (ECHR) which provides that "everyone has the right to respect for his private and family life, his home and his correspondence", and no State interference shall occur except such as is in accordance with the law and is necessary in a democratic society in the interests of factors including the prevention of disorder or crime.⁸ *S and Marper* involved a challenge to the law in England and ***Crim. L.R. 892** Wales which was the most permissive in the common law world as to the populations from whom DNA samples could be both taken and retained. In England and Wales a non-intimate sample⁹ could be taken without consent from a person who has been charged with, informed that he will be reported for, or convicted of a recordable offence,¹⁰ and he need not be in police custody.¹¹ Such samples are kept indefinitely, regardless of the consequences of the investigation or subsequent criminal trial.¹² In the domestic setting, the Court of Appeal had upheld the unsuccessful judicial review of the decision to collect and retain DNA from S (an acquitted child) and Marper (an adult against whom proceedings were not initiated) on the grounds that the risks to the individual were not great and were outweighed by the benefits of retention. The House of Lords dismissed their appeal, finding that there was no breach of art.8 but that if such a breach had occurred it constituted minor interference only, and moreover that retention was proportionate to its aims. However, the Grand Chamber in Strasbourg held that this "blanket and indiscriminate" retention of DNA violated art.8¹³ and favoured limiting non-conviction retention to serious suspected offences, noting in particular the Scottish approach.¹⁴ DNA may be collected in Scotland from a person who has been arrested and is in custody or detained on suspicion of having committed an offence punishable by imprisonment,¹⁵ that is, a slightly narrower range of persons than in England and Wales. However, what is more notable in the context of this article is the general rule in Scotland of destruction of samples and information derived from them following a decision not to institute criminal proceedings or when proceedings do not end with conviction.¹⁶ DNA retention is allowed after prosecutions which do not lead to conviction for certain sexual or violent offences only.¹⁷ The Grand Chamber approved of this scheme, indicating cautious support for non-conviction DNA databases per se, albeit with more restrictive population ***Crim. L.R. 893** policies than in England. Nevertheless, besides endorsement of the Scottish legislation, no indication was given as to what thresholds would be permissible to ensure compliance with the privacy concerns of the European Court.

In addition to directly relevant ECHR jurisprudence, it is instructive to look to the alternative privacy arguments propounded in the United States to see how this right is conceptualised. Though the US Supreme Court has not yet accepted a case challenging the storage of DNA, privacy concerns have been raised in State and federal circuit courts. In contrast to England and Wales, DNA is collected from a circumscribed range of people in the United States¹⁸: the federal DNA Analysis Backlog Elimination Act of 2000¹⁹ authorised DNA sampling from individuals in the custody of the Bureau of Prisons who were convicted of serious offences, such as homicide, sexual abuse or exploitation, kidnapping, robbery and burglary; this was extended by the USA Patriot Act of 2001 to include terrorism-related crimes²⁰ and by the Justice for All Act of 2004 to cover all felonies, violent and sexual crimes.²¹ Although some states such as South Dakota and Louisiana have permitted DNA collection from arrestees since the end of the 1990s, arrestee samples could not be uploaded to the national database until the DNA Fingerprinting Act of 2005 amended the DNA Analysis Backlog Elimination Act of 2000 by requiring DNA sample collection by US agencies “from individuals who are arrested or from non-U.S. persons who are detained under the authority of the United States”.²² In addition, a sizeable minority of states now have laws authorising arrestee DNA sampling, although this pertains to felonies or offences punishable by a minimum period of imprisonment only.²³ No state currently permits sampling from all persons charged with or arrested for suspected recordable or imprisonable offences, as is the case in both Scotland and England and Wales.

In US case law DNA retention is somewhat conflated with DNA collection: nevertheless it is still useful to outline the arguments as these often represent implicit approval of ongoing retention. The compulsory extraction of blood for DNA profiling has been viewed as constituting a “search” as it affects the “reasonable expectation of privacy”,²⁴ thus bringing the procedure within the scope of the Fourth Amendment which requires all searches and seizures to be reasonable.²⁵ Constitutional jurisprudence has refined the parameters of this Amendment to provide that although a search or seizure must usually be conducted with a warrant and with probable cause, it may still be reasonable if obtaining a **Crim. L.R. 894* warrant was impractical, if individualised suspicion exists, or where a “special need” that goes beyond normal law enforcement purposes was present.²⁶ The court may also invoke a general balancing approach, the “totality of circumstances” test, which sets the State interest against that of the individual to determine the reasonableness of the search “by assessing, on the one hand, the degree to which it intrudes upon an individual's privacy and, on the other, the degree to which it is needed for the promotion of legitimate governmental interests.”²⁷ Every court which has analysed the federal or equivalent state statutes permitting collection and analysis of DNA from convicted persons has upheld them as compliant with the Fourth Amendment,²⁸ but there is less consistency regarding the position of unconvicted individuals in state courts. For the most part, the general balancing test has been applied to uphold the collection of DNA samples from persons arrested for violent felonies on the basis that it entails a minimal privacy intrusion, and because of the diminished expectation of privacy of arrestees when compared with the general population and the compelling interest in DNA as a law enforcement tool.²⁹ However, in *Friedman v Boucher and Luzaich* the Ninth Circuit found that the sampling of an arrestee was in breach of the Fourth Amendment.³⁰ Neither the special needs test nor the general balancing test validated DNA collection: the former did not apply since the only government interest in taking DNA was “to help solve ‘cold cases’ ... clearly a normal law enforcement function”, and the search was not reasonable on a balancing approach as the only limitation permitted on pre-trial detainees' right to be free from suspicionless searches was for prison security.³¹

While most State courts have approved of pre-trial DNA collection because of the limited invasion of privacy, it is noteworthy that ongoing retention is rarely unravelled from its initial acquisition in the United States. Harlan points out that such a distinction was made in *Skinner v Railway Labor Executives' Association*³² where the taking of a biological sample for a drugs test and its subsequent analysis were seen as discrete events requiring independent Fourth Amendment scrutiny.³³ However in *Haskell and Ento v Brown* the Court rejected the claim that “running an individual's DNA profile against other DNA profiles in order to inculcate that individual in a crime ... is a second, unreasonable search”³⁴ and held that the **Crim. L.R. 895* subsequent “search” is merely the matching of a legitimately-obtained DNA profile against other DNA profiles in a database rather than a more invasive search of the original sample.³⁵ This demonstrates that the jurisprudence on DNA collection concerning its apparently minimal privacy intrusion is also relevant for retention, given that the same analysis and justifications are deemed to apply.

Thus, it appears that the ECHR protects a richer or deeper conception of privacy constructed around a person's ability to live privately and to have dominion over personal material taken from his body, whereas the Fourth Amendment does not seem capable of extending to cover protracted retention of

DNA. Nevertheless, the right to privacy under the ECHR does not preclude retention of arrestees' DNA as long as it occurs for certain suspected offences and categories of suspects only. However, it is not clear that the more serious the suspected offence, the more we should permit incursions on the individual's rights pre-trial.³⁶ The legitimacy of a crime control tactic should be judged in terms of its consequences for individual rights, rather than the severity of the suspected crime.

DNA retention may be further justified in the face of privacy arguments by the assertion that genetic material is akin to fingerprint data. US courts in *Anderson v Virginia* and *United States v Pool* upheld the collection of DNA samples from persons arrested for violent felonies on the basis that it was equivalent to the taking of fingerprints,³⁷ but did not explore whether the retention of both is comparable. In *Van der Velden v The Netherlands* the ECtHR distinguished cellular material from fingerprints given the use to which the former could be put in future, given possible advances in science.³⁸ Similarly, in *S and Marper* the Grand Chamber was careful to differentiate fingerprints and cellular samples and analysed them separately, emphasising legitimate concern about potential use and the highly personal nature of the latter.³⁹ The Chamber followed *Van der Velden* (and Baroness Hale who dissented in the House of Lords) in concluding that systematic retention of DNA samples interfered with the right to respect for private life, given the nature and amount of information in such samples. This line of thought is also evident in *United States v Mitchell* where the court viewed the search in this instance as one that reveals the most intimate details of an individual's genetic condition and felt that while the taking of the sample may not be intrusive the searching of it may be so.⁴⁰ This is one of the few times in US jurisprudence that a distinction is made between DNA collection and subsequent comparisons, although little attention is paid to retention on its own. The degree to which DNA differs from fingerprints in terms of the depth and potential use of the material underlines that a different privacy paradigm must be applied, and indeed this rightly contributed to the finding of certain US courts and the Grand Chamber.

Whether DNA is held as a sample or profile may also be relevant to privacy. As previously outlined, a wider range of intimate genetic information may be gleaned from the former, while a DNA profile is a set of identifying characteristics *Crim. L.R. 896 from areas of DNA that do not reveal a person's physical traits or medical conditions. Moreover, a DNA profile consists of 20 numbers and a gender indicator and thus may only be read with the aid of technology.⁴¹ The distinction between samples and profiles was stressed by the UK Government in *S and Marper* given that a person is unidentifiable from a profile to the untrained eye. The Chamber accepted the difference between samples and profiles but felt that retention of the latter still interferes with art.8, given the "substantial amounts of unique personal data" in profiles, including information about familial relationships and ethnic origin.⁴²

One aspect of DNA retention and privacy not considered fully in extant jurisprudence is the status of databases as techniques of surveillance and the systems of governance which are thus warranted: DNA databases have been described as "mass surveillance" as they are not targeted at any specific individual but store images and information from a wider population for possible future use.⁴³ However, the existing DNA databases in the United Kingdom and United States are not mass surveillance in the sense of CCTV which is not discerning with regard to who it monitors. Thus, DNA databases fall into an interim category by retaining information on a mass scale of certain targeted categories of people, premised on the perceived risk they pose. Previously, the ECtHR has found that where there is state surveillance of an individual, supervisory control ideally should come from judicial officers,⁴⁴ but other arrangements have been deemed to be acceptable if "independent of the authorities carrying out the surveillance, and ... vested with sufficient powers and competence to exercise an effective and continuous control".⁴⁵ For example, in *Leander v Sweden* a police register of confidential personal information used to assess candidates for positions critical to national security was legitimate despite the lack of court intervention, based on supervision from independent parliament sources and when the interest in protecting national security was balanced against the seriousness of the interference with privacy.⁴⁶ In contrast, although there was judicial oversight of phone tapping in *Kruslin v France* the quality of the law was not sufficient for the surveillance to be in accordance with law.⁴⁷ If we draw an analogy, it appears that judicial involvement is required at an earlier stage of the DNA retention process in order to safeguard the right to privacy unless adequate alternative supervision is provided. Oversight of the UK's National DNA Database (NDNAD) is provided by the NDNAD Strategy Board, comprising members from the Association of Chief Police Officers, the Home Office, the National Policing Improvement Agency, the Association of Police Authorities, the Human Genetics Commission and the Information Commissioner's Office,⁴⁸ but the original decision about inclusion on the databases in England and Wales is purely a police matter. While initially retention in Scotland is also contingent *Crim. L.R. 897 on police judgment,⁴⁹ the

approval of a sheriff is required for extension of the time frame for unconvicted persons.⁵⁰ This line of argument was not explored in *S and Marper* but the absence of judicial approval for DNA retention of suspects is significant for privacy. Retaining personal biological material may not be conceptually equivalent to the State monitoring one's phone calls, given the greater direct intrusion of the latter; nevertheless, the degree and depth of personal and familial information contained in DNA indicates that judicial or other independent oversight is warranted to safeguard an individual's privacy. Indeed, central to the court's decision in *United States v Pool* in balancing the competing interests was the "judicial involvement" or grand jury determination of probable cause before DNA testing.⁵¹

The duration of retention is also relevant to personal privacy. In England, DNA of all persons charged with or reported for a recordable offence could be collected and stored indefinitely, and though an application could be made to the relevant police force for removal of DNA from the database this rarely was granted.⁵² This was seen to be disproportionate with respect to the law's aims by the Nuffield Council on Bioethics,⁵³ and such concerns were translated into robust legal criticism in *S and Marper*. The Grand Chamber extolled the virtues of the Scottish measures under which indefinite retention of DNA from unconvicted persons is not allowed per se; according to s.18A(4) of the Criminal Procedure (Scotland) Act 1995 the destruction date is three years following the conclusion of proceedings and a sheriff may extend this for no more than two years,⁵⁴ but nothing prevents recurring police applications to amend further the destruction date. Furthermore, non-conviction retention is permitted only when proceedings have been instituted and have not resulted in conviction rather than after arrest or charge. *S and Marper* prompted a lengthy consultation process by the Home Office, characterised by a seeming reluctance to amend the law relating to the duration of retention.⁵⁵ A more restrictive model has been constructed by the Crime and Security Act 2010, providing renewable retention periods of between three and six years depending on the age of the suspect and the gravity of the alleged offence. However, this Act has not been implemented, and the Conservative/Liberal Democrat coalition now intends to move to the Scottish approach by means of the Freedom (Great Repeal) Bill.⁵⁶

The right to privacy appears to be the dominant barrier to the retention of unconvicted persons' DNA, and thus art.8 and the Fourth Amendment form the basis of most jurisprudence on this issue. The scope of DNA retention in a population and temporal sense, the unique quality of DNA and the governance of databases are relevant in determining if the encroachment on privacy is justifiable. Restricting retention to persons suspected of serious offences is understandable at **Crim. L.R. 898* first glance but is not sustainable in a rights' sense given that the gravity of the offence does not increase the likelihood of their guilt nor of re-offending. While imposing a threshold such as this reduces the population whose right to privacy is limited, this is not the approach advocated here. Instead, concerns about privacy may be addressed adequately by more rigorous mechanisms of governance, by requiring judicial approval to retain cellular material, and by delineating a maximum period of storage.

The presumption of innocence

Having dismissed the apparent challenge posed to DNA retention by the right to privacy, the presumption of innocence will now be examined. The retention of the DNA of unconvicted persons speaks to the State's suspicion of their likelihood to (re-)offend, and thus distinguishes them from "truly" innocent people who have not come to the attention of the police. It entrenches an interim categorisation of suspicion which adheres to individuals once they have come to be charged or arrested, evident in the differential treatment accorded in the storage of their cellular material. In broad terms, this may compromise the precept that everyone should be presumed innocent by the State, by keeping the DNA of legally innocent persons on a database which is otherwise populated by convicted persons. While the schemes in place in Scotland and the United States narrow the range of relevant unconvicted persons, this does not mitigate the effect on those who remain included in the database.

Thus, DNA retention appears to impinge on the presumption of innocence, and indeed this point has been argued in a number of cases in the Strasbourg court, although consideration has been somewhat oblique. While such an argument was raised in *W v The Netherlands* the application was deemed to be inadmissible, and in *Van der Velden v The Netherlands* the court felt that inclusion in the database may in fact benefit the applicant by excluding him from the list of suspects of a crime for which there is DNA evidence, rather than casting doubt on his innocence.⁵⁷ In *S and Marper*, the applicants claimed that retention casts suspicion on unconvicted persons implying that they were not "wholly innocent".⁵⁸ Although in the domestic setting the Court of Appeal asserted that a constable

could destroy DNA evidence if the person were free from “any taint of suspicion”,⁵⁹ the ECtHR expressed concern that unconvicted persons, who “are entitled to the presumption of innocence, are treated in the same way as convicted persons”.⁶⁰ This factor underpinned its final judgment on art.8, demonstrating that any analysis of the “presumption of innocence”, as specifically alluded to by the Chamber, was embodied within concerns about privacy.

Similarly, little attention has been paid in the United States to the presumption of innocence per se in relation to DNA databases. In *United States v Pool*, when dismissing the claim that DNA collection breaches procedural due process as protected by the Fifth Amendment, the District Court for the Eastern District of ***Crim. L.R. 899** California noted that the DNA removal procedures in the event of an exoneration or dismissal of charges ensure that “the risk of an innocent person's DNA being included in CODIS [the US federal DNA database] is minimal”.⁶¹ However, in *United States v Mitchell* the court granted the defendant's motion in opposition to the collection of a pre-trial DNA sample,⁶² and relied on the presumption of innocence in so doing, although this, as in *S and Harper*, was inextricably bound up with the right to privacy and concerned collection and the storage that follows rather than retention specifically. The court stressed the neglect in *United States v Pool* of “the moral polestar of our criminal justice system--the presumption of innocence”.⁶³ Moreover, the court concluded that if a law enforcement officer has probable cause to believe that an arrestee is or was involved in criminal activity, then a proper warrant may be sought for DNA collection.⁶⁴

The presumption of innocence, potentially breached by non-conviction databases, formed part of a corpus of rights developed to establish some semblance of parity between the more vulnerable individual and the State which is endowed with substantial resources that facilitate the investigation, detection and prosecution of crime. It is less a reflection of the likely blamelessness of the individual but rather a recognition of the disparity in power and capabilities between the opposing parties in the criminal process.⁶⁵ Nevertheless, notwithstanding the intuitive implication that DNA retention affects a person's right to be presumed innocent, it is less clear whether the presumption as legally construed is in fact compromised, thus explaining its relative absence in judicial pronouncements as opposed to counsels' argument. The presumption of innocence is safeguarded by art.6(2) of the ECHR which provides that “[e]veryone charged with a criminal offence shall be presumed innocent until proved guilty according to law” and requires that a court,

“should not start with the preconceived idea that the accused has committed the offence charged; the burden of proof is on the prosecution, and any doubt should benefit the accused.”⁶⁶

In the United States the presumption of innocence is seen to derive from the Fifth Amendment,⁶⁷ and the US Supreme Court has described the presumption as “a basic component of a fair trial under our system of criminal justice”⁶⁸ and as “axiomatic and elementary”.⁶⁹

***Crim. L.R. 900** The key interpretive question regarding the presumption concerns the stage of the process at which it applies, as this indicates the persons to whom it accrues and the agents of the State it binds. As Ashworth notes, the scope and meaning of the presumption are “eminently contestable” given that it may operate at the level of the criminal trial only or in the criminal process more broadly.⁷⁰ In this respect Ni Raifeartaigh presents a useful typology of the presumption, where at one end of the spectrum it has no application pre-trial while at the opposite end it prohibits all restrictions on the accused's liberty which presuppose that he is guilty.⁷¹ The intermediate view is that it applies at the pre-trial stage but prohibits punishment of the accused for alleged criminal conduct,⁷² and indeed ECHR case law embodies this view to require that “pre-trial procedures should be conducted, so far as possible, as if the defendant were innocent”.⁷³ In the United States, the presumption is rather more narrowly construed and has been described not as a presumption,

“in the strict sense of the term [but]... simply a rule of evidence which allows the defendant to stand mute at trial and places the burden upon the government to prove the charges against him beyond a reasonable doubt.”⁷⁴

The presumption does not apply to pre-trial proceedings in the United States, rather it,

“allocates the burden of proof in criminal trials; it also may serve as an admonishment to the jury to judge an accused's guilt or innocence solely on the evidence adduced at trial and not on the basis of suspicions.”⁷⁵

Thus, the presumption of innocence as interpreted in the United States does not pose any challenge to the retention of arrestees' DNA. Moreover, one could argue that under the ECHR the presumption in a strict sense cannot apply once a person has been arrested, given that reasonable suspicion of

involvement in crime is required on the part of the police before the formal mechanisms of the criminal justice process swing into action.⁷⁶ Nevertheless, the maintenance of formalised suspicion in the form of DNA retention may pose problems in a rights sense, given that, unlike the situation in the United States, the presumption of innocence in ECHR jurisprudence extends beyond a strictly procedural guarantee to encompass a “reputational” aspect which aims to protect the image of the person.⁷⁷ However, as Trechsel notes, complex problems surround the application of this element of the presumption of innocence.⁷⁸

***Crim. L.R. 901** Judicial decisions or reasoning reflecting an opinion that a person is guilty, such as requiring him to pay the cost of criminal proceedings and compensation or stating that had a prosecution not been time-barred it would “very probably have led to ... conviction”, breach this aspect of art.6(2).⁷⁹ Moreover, where a court expresses suspicion about an acquitted individual (rather than opining that he is guilty), such as by refusing compensation to him or by saying that suspicion has not been “dispelled”, the presumption will also have been infringed.⁸⁰ However,

“[t]he voicing of suspicions regarding an accused's innocence is conceivable as long as the conclusion of criminal proceedings has not resulted in a decision on the merits of the accusation.”⁸¹

In other words, where criminal proceedings are discontinued, statements which describe a state of suspicion, as opposed to those which constitute a determination of guilt, are compatible with the presumption of innocence.⁸² Furthermore, art.6(2) may be breached by State actors other than the courts. In *Allenet de Ribemont v France*, the Minister of the Interior and senior police officers implicated the applicant in a murder in statements made during a press conference, after the applicant had been arrested but before trial.⁸³ The court found a breach of art.6(2) on the basis that this was,

“clearly a declaration of the applicant's guilt which, firstly, encouraged the public to believe him guilty and, secondly, prejudged the assessment of the facts by the competent judicial authority.”⁸⁴

Non-conviction DNA retention is not an expression of guilt but may denote suspicion on the part of the State as to the future criminality of the person and his likelihood of re-offending. However, in *S and Marper* the Grand Chamber stated that “the retention of the applicants' private data cannot be equated with the voicing of suspicions”.⁸⁵ While this distinction is not explained or explored by the Chamber, one can speculate that it is the absence of express articulation and dissemination of the fact of DNA retention which differentiates it from the voicing of suspicion. One could respond that DNA retention is on a continuum from the latter as it represents State opinion about criminal tendencies on the part of the charged or acquitted person. If such an analogy is accepted and, despite the comment of the Grand Chamber, we conceive of State storage of DNA as representing a type of expression of suspicion, then the presumption of innocence in its reputational sense may be threatened. However, as may be seen from the text of art.6(2), an individual must be charged before the presumption is engaged, thus automatically leaving some of the population of the NDNAD beyond its scope (although not those in the Scottish database). This indicates that the presumption of innocence as legally defined and construed does not fundamentally challenge the legitimacy of non-conviction DNA retention.

***Crim. L.R. 902** A further comparison may be drawn between DNA retention and pre-trial detention after the refusal of bail which also appears to equate an individual with convicted persons. The Bail Reform Act 1984 in the United States allows bail to be refused if there is clear and convincing evidence that no condition or combination of pre-trial release will reasonably assure the safety of any other person and the community, and art.5 of the ECHR permits comparable constraints on the right to liberty. Indeed, Laudan notes that bail hearings cannot be squared with a broad construal of the presumption of innocence⁸⁶: thus if refusal of bail is permissible surely the less invasive retention of DNA must be too. Restrictions on the refusal of bail indicate what is appropriate in the context of DNA retention, given that in both instances the rights of an individual who is legally innocent are being restricted by virtue of a possible risk of criminality. “Clear and convincing evidence”⁸⁷ or “strong and specific reasons” are required for restraining the defendant's liberty⁸⁸ on the basis of his presumed innocence and the rule of respect for individual liberty⁸⁹: in other words, each bail case is examined on its merits unlike the “blanket” retention of DNA without conviction in England and Wales. However, in contrast to pre-trial detention, and as the UK Government emphasised in *S and Marper*, there appears to be no practical consequence of retention for the relevant individual unless his DNA later matches a crime-scene profile.⁹⁰ To be sure, the impact on an individual's rights as a result of DNA retention is more remote and undoubtedly of less immediate effect than the refusal of bail, but the incursion on freedom of personhood that it entails is no less real. Storing DNA means state retention

of unique personal data which may also reveal information about familial and genetic relationships and ethnic origin.⁹¹ While the retention of DNA does not compromise liberty in the physical sense, a similarly cautious approach should be adopted when considering whether DNA should be stored after acquittal, or when no action at all is taken, given the potential use of DNA and the level of personal information contained within. Moreover, bail refusal by definition ends on acquittal or the dropping of charges, whereas DNA retention may not. Given that the refusal of bail follows a court decision, judicial intervention should similarly be required for the retention of a DNA sample. Nevertheless, the bail analogy further indicates to us that non-conviction DNA retention is not in breach of the presumption of innocence as currently conceived of in ECHR jurisprudence, as long as court approval is required.

A “right” not to be “stigmatised”?

The unease about the presumption of innocence expressed by the Grand Chamber in *S and Marper* seemed to conflate its legal interpretation with a normative concern about the interest in not being stigmatised unnecessarily. As noted above, even the more expansive reputational element of the presumption, as currently **Crim. L.R. 903* interpreted, would only prohibit DNA retention if we conceive of retention as a “voicing of suspicion”, and a proportion of the population of the non-conviction database would still fall beyond its scope. Nevertheless, ongoing storage of DNA, although based initially on reasonable police belief of involvement in crime, is not in line with the spirit of the broader interpretation of the presumption of innocence expounded briefly in *S and Marper*.⁹² Indeed, the Chamber may have muddled the waters somewhat by referring to the “presumption” explicitly.⁹³ I propose to separate this interest from existing legal principles and to characterise it as a right in not being “stigmatised” by the State.⁹⁴ This provides the most robust opposition to non-conviction DNA retention, rather than any argument based on the right to privacy or the presumption of innocence as it currently stands.⁹⁵ Protection of this interest would guard against the generation of a continuum of guilt, where minor incursions on an individual's rights are permitted, as long as a shade of suspicion remains.

It may be argued, as indeed it was by the UK Government in *S and Marper*, that there is no stigma in retention⁹⁶ as there is no public articulation of suspicion. In response, the Grand Chamber acknowledged the applicants' “perception that they are not being treated as innocent”.⁹⁷ The conception of stigma here is not equivalent to discriminatory treatment,⁹⁸ but rather the official labelling of certain people as potentially criminal. Although it could be said that the stigma of DNA retention is overstated on the basis that an individual would need to divulge his being on the database for anyone to know, internalisation of a stigmatic label occurs by virtue of his treatment by the State.⁹⁹ This is what distinguishes this interest from the legal interpretation of the presumption of innocence. Moreover, it is not inconceivable that a State official or leaked document could reveal a person's inclusion in the database, thereby compounding the stigma. Nevertheless, public communication should not be seen a pre-requisite for someone to be stigmatised by the State. Indeed, it is curious that despite the Grand Chamber's recognition that the maintenance of an arrestee database stigmatises those whose DNA is retained within, it never engaged with how this could be justified in relation to the Scottish policy of holding DNA samples from a limited number of prosecuted but unconvicted individuals. While the circumscribed scheme in Scotland seems compliant with the right to privacy, it nonetheless has a stigmatising effect on those whose genetic material is retained.

**Crim. L.R. 904* The right in not being stigmatised by the State should be enjoyed by all individuals, in contrast to the presumption of innocence which accrues only to those charged with a crime. Recognition of such a right would preclude the formalised entrenchment of a category of suspects who are subject to increased State intervention because of prior suspicion which led to the initial arrest. Conceptually speaking, the treatment of a class of suspects in this manner does not cohere with the underlying ethos of the ECHR. The ECHR permits qualification of some liberties such as is “necessary in a democratic society”, but as Tadros has stressed this must not compromise democratic norms.¹⁰⁰ As well as requiring signatories to adhere to the precepts of democracy, the ECHR may be interpreted as enshrining human rights that are liberal in nature.¹⁰¹ While the European conception of human rights sometimes diverges from the libertarian US model to encompass a more robust protection of welfare interests, the European and American paradigms may be seen as comparable in relation to criminal justice specifically, in that due process rights safeguard the individual in the pursuit of crime control. Thus, the means of tackling criminality in Europe and the United States must be founded on a liberal conception of the polity in which each person is entitled to the basic liberties required to realise his entitlement to equal concern and respect,¹⁰² and where there is to the greatest extent possible an absence of external constraints, freedom from unnecessary

interference and a checked form of government.¹⁰³ In other words, adherence to the principles of liberalism militates against the adoption of results-oriented, risk-based policies which undercut the primacy of the individual and subjugate conventional notions of justice and rights. Therefore, although the retention of DNA does not transgress the presumption of innocence as legally construed, in a normative sense it influences how the State views the citizen, or at least certain groups of society, namely those who come to the attention of the police, notwithstanding the result of subsequent investigation or prosecution. Retaining the DNA of unconvicted persons represents a shift away from the classical liberal ethos of negative liberty and minimal interference from the state, in order to improve the State's capacity to deal with criminality and demonstrates a utilitarian favouring of crime control tactics. As Cole and Lynch have stated, databases open new realms of suspect identification whereby the population of the database becomes a "pool of suspects or presuspects"¹⁰⁴ : this is inimical to the precepts of a liberal society in which strict limits are placed on State powers and in which individual rights "trump" collective demands or ends.¹⁰⁵

Conclusion

The use of DNA in the criminal justice system, in particular its storage in databases, is an uneasy mix of old and new logics, with the desire for technological advancement intersecting with anti-modern implications of guilt and of suspect **Crim. L.R. 905* populations. This article sought to unpack the leading arguments put forward in opposition to the retention of DNA specifically. Examining the rights engaged by State storage of DNA implies that the sharpest challenge lies in a normative conception of the avoidance of stigmatisation and the foundational precepts of the liberal state, rather than the right to privacy or the presumption of innocence which provide the traditional framing for the debate. Privacy concerns may be addressed by reducing the duration of retention, by requiring judicial intervention and by improving systems of governance; however none of these measures engage with the differential treatment of some members of society. It is the expression of a lingering suspicion which is cause for most concern in respect of DNA retention. Although the targeting of certain individuals (that is, "the usual suspects") by the police may be unavoidable, to have it articulated and entrenched in legislation is not acceptable in a liberal democracy.

One possible resolution to this disquiet about stigma and discrimination lies in the creation of a "universal" database. Kaye and Smith are the foremost academic proponents of a population-wide database with strict privacy protections,¹⁰⁶ a suggestion which has been echoed in the United Kingdom by Lord Justice Sedley.¹⁰⁷ While a universal database would, by definition, moderate the current discriminatory and stigmatising effect of selective DNA retention, and while rigorous regulation and governance could offset privacy worries, maintaining what is in essence mass surveillance by means of a DNA database would represent a fundamental shift in our liberal democracy. Such a crime control mechanism would run contrary to the prevailing political principles of limited state intervention and shift the ethos of the criminal justice system dramatically. It would be a disproportionate means of crime control and a disproportionate reaction to concerns about discrimination which are more appropriately dealt with by limiting rather than expanding the scope of the database. Moreover, in a practical sense, a universal scheme would entail huge financial costs to establish, maintain, search and safeguard such a database. So, despite the appeal of a universal DNA database as an ostensibly non-stigmatising investigative tool, its legitimacy is undermined critically by practical problems and, more importantly, by the implications for the State/citizen relationship in a liberal polity. Rather than calling for the expansion of the DNA retention scheme, the concerns I explored in this paper about privacy and stigmatisation are more effectively and readily addressed by requiring judicial intervention before DNA retention is permitted for a limited period of time, by improving governance, and most crucially by precluding the storage of DNA of unconvicted persons after prosecution. While the investigative utility of a DNA database is indisputable, its parameters must be strictly confined to safeguard the rights of innocent individuals.

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1. F.R. Bieber, "Science and Technology of Forensic DNA Profiling: Current Use and Future Directions" in D. Lazer, *The Technology of Justice: DNA and the Criminal Justice System* (USA: The MIT Press, 2004), Ch.3; M. Redmayne, "Doubts and Burdens: DNA Evidence, Probability and the Courts" [1995] Crim. L.R. 464.

2. DNA collection does not unjustifiably affect the right to bodily integrity in the European and US contexts. The European

Court of Human Rights (ECtHR) emphasised in *Juhnke v Turkey*, May 13, 2008, no. 52515/99 at [72] that arts 3 and 8 do not “prohibit recourse to a medical procedure in defiance of the will of a suspect in order to obtain from him or her evidence of his or her involvement in the commission of a criminal offence” but this must be warranted on the facts of a particular case and must not constitute inhuman and degrading treatment. Similarly, although compulsory urine tests to detect drug consumption in prisoners interfered with art.8, they were deemed “necessary in a democratic society ... for the prevention of disorder or crime” (*Peters v Netherlands*, Commission App. No. 21132/93, April 6, 1994). In *United States v Kincade*, 379 F.3d 813 (9th Cir. 2004) (en banc) the intrusion of a blood test for the purposes of DNA collection was described as “not significant” and in *United States v Pool* 645 F. Supp. 2d 903 (2009) the intrusion was seen as “minimal”. There buccal swabs and blood sampling were equated, in contrast to the legislatively entrenched distinction between intimate and non-intimate samples in s.65 of Police and Criminal Evidence Act 1984 (as amended).

3. The Grand Chamber in *S and Marper v United Kingdom* (2009) 48 E.H.R.R. 50; [2009] Crim. L.R. 355 found that the taking of DNA pursued the legitimate aim of “linking a particular person to the particular crime of which he or she is suspected” (para.100) and while it recognised the importance of such information in the detection of crime it “delimit[ed] the scope of its examination” to the retention of such persons’ DNA (para.106). In the absence of a Supreme Court decision on point, US State courts have supported the forcible collection of DNA from arrestees: see *Anderson v Virginia*, 650 S.E.2d 702, 706 (Vir. 2006); *United States v Pool* 645 F. Supp. 2d 903 (2009); *Haskell and Ento v Brown* 677 F. Supp. 2d 1187 (2009).
4. The dicta in *Saunders v United Kingdom* (1997) 23 E.H.R.R. 313 at [69] and *Schmerber v California* 384 U.S. 757, 761 (1966) discount decisively physical evidence and therefore DNA from the scope of the privilege against self-incrimination.
5. A. Roberts and N. Taylor, “Privacy and the DNA database” (2005) E.H.R.L.R. 381.
6. The term “non-conviction” DNA retention is used throughout this piece as shorthand for storage of DNA which is not dependent on a criminal conviction and occurs regardless of the results of a criminal investigation or prosecution. The only viable alternative term, “pre-conviction”, may suggest that a conviction does indeed follow, which is not the case.
7. *Van der Velden v The Netherlands*, no. 29514/05, December 7, 2006; *W v The Netherlands*, no. 20689/08, January 20, 2009; *Jones v Murray*, 962 F.2d 302 (4th Cir. 1992); *United States v Kimler*, 335 F.3d 1132 (10th Cir. 2003); *Grocceman v U.S. Department of Justice*, 354 F.3d 411 (5th Cir. 2004); *Green v Berge*, 354 F.3d 675 (7th Cir. 2004); *United States v Kincade* 379 F.3d 813 (9th Cir. 2004) cert. denied, 544 U.S. 924 (2005); *Nicholas v Goord* 430 F.3d 652 (2d Cir. 2005); *United States v Sczubelek*, 402 F.3d 175 (3rd Cir. 2005); *Padgett v Donald*, 401 F.3d 1273 (11th Cir. 2005), cert. denied, 546 U.S. 820, (2005); *Wilson v Collins*, 517 F.3d 421 (6th Cir. 2006); *United States v Conley*, 453 F.3d 674 (6th Cir. 2006); *United States v Hook*, 471 F.3d 766 (7th Cir. 2006); *United States v Kraklio*, 451 F.3d 922 (8th Cir. 2006); *United States v Weikert*, 504 F.3d 1 (1st Cir. 2007); *United States v Amerson*, 483 F.3d 73 (2d Cir. 2007); *United States v Kriesel*, 508 F.3d 941 (9th Cir. 2007); *United States v Banks*, 490 F.3d 1178 (10th Cir. 2007).
8. For analysis of *S and Marper* see K. Beattie, “S and Marper v UK: privacy, DNA and crime prevention” (2009) E.H.R.L.R. 229; L. Heffernan, “DNA and Fingerprint Data Retention: S and Marper v United Kingdom” (2009) 3 E.L.R. 491.
9. See ss.62 and 63 of the Police and Criminal Evidence Act 1984. Section 65 states that an “intimate sample” means a sample of blood, semen or any other tissue fluid, urine, saliva or pubic hair, or a swab taken from a person’s body orifice, while a “non-intimate sample” means a sample of hair other than pubic hair, a sample taken from or from under a nail, a swab taken from any part of a person’s body other than a body orifice, or a footprint or a similar impression of any part of a person’s body other than a part of his hand. Section 58 of the Criminal Justice and Public Order Act 1994 reclassified a swab from the mouth as a non-intimate sample which therefore does not require consent and does not need to be taken by a health care professional.
10. A recordable offence is one which carries the possibility of a custodial sentence as well as other, non-imprisonable offences in the Schedule to the National Police Records (Recordable Offences) (Amendment) Regulations 2005 (SI 2005/3106).
11. Criminal Justice Act 2003 s.10. The provisions in Northern Ireland governing DNA retention are identical to those in England and Wales (Police and Criminal Evidence Order of Northern Ireland 1989, as amended by the Criminal Justice and Police Act 2001).
12. Criminal Justice and Police Act 2001 s.64(1)A. This was prompted by controversy stemming from the decision of the Court of Appeal in *Weir* as to the inadmissibility of DNA evidence which should have been destroyed. The Court of Appeal refused to admit the evidence and quashed the conviction for murder ([2000] All E.R. (D.) 751), although the House of Lords later held that admissibility should have been a matter for the trial judge ([2001] 2 All E.R. 216).
13. *S v United Kingdom* (2009) 48 E.H.R.R. 50 at [119].
14. *S v United Kingdom* (2009) 48 E.H.R.R. 50 at [109]-[110].
15. Criminal Procedure (Scotland) Act 1995 s.18.
16. Criminal Procedure (Scotland) Act 1995 s.18(3).
17. Section 18A, as inserted by the Police, Public Order and Criminal Justice (Scotland) Act 2006. The list of relevant offences is contained in s.19A(6). The possession of offensive weapons has been added to the list of relevant violent offences by the Criminal Justice and Licensing (Scotland) Act 2010. For general comment on the Bill see L. Campbell,

- "The Scottish DNA Database and the Criminal Justice and Licensing (Scotland) Bill" (2010) 14 *Edinburgh Law Review* 290-294.
18. Rather than focusing on specific states in the United States, I will outline federal rules in this regard, although challenges in state courts using constitutional jurisprudence will be considered later. Federal law and state law on DNA collection and retention may differ, and inclusion in State DNA index systems (SDIS) or the National DNA Index System (NDIS) is governed by state and federal law respectively. The Combined DNA Index System (CODIS) is the "automated DNA information processing and telecommunication system that supports NDIS" (see <http://foia.fbi.gov/ndispia.htm> [Accessed September 2, 2010]) although the acronym "CODIS" is often used as shorthand for the national database.
 19. DNA Analysis Backlog Elimination Act of 2000 Public Law 106-546, 114 Stat. 2726-2737.
 20. DNA Analysis Backlog Elimination Act of 2000 Public Law 107-546, 115 Stat. 272-402 (2001), Title V.
 21. DNA Analysis Backlog Elimination Act of 2000 Public Law 108-405, 118 Stat. 2260-2293 (2004) Title II, the "Debbie Smith Act of 2004".
 22. Title X of the Violence Against Women and Department of Justice Reauthorization Act of 2005, Public Law 109-162.
 23. Alaska, Arizona, California, Kansas, Louisiana, Maryland, Michigan, Minnesota, New Mexico, North Dakota, South Carolina, South Dakota, Tennessee, Texas, Vermont and Virginia have laws authorising arrestee DNA sampling. See the website of the National Conference of State Legislatures: <http://www.ncsl.org/IssuesResearch/CivilandCriminalJustice/StateLawsonDNADatabanks/tabid/12737/Default.aspx> [Accessed September 2, 2010].
 24. *Katz v United States* 389 U.S. 347 (1967).
 25. *United States v Kincade*, 379 F.3d 813 (9th Cir. 2004) (en banc).
 26. *Schmerber v California*, 384 U.S. 757 (1966); *Terry v Ohio*, 392 U.S. 1 (1968); *New Jersey v T.L.O.* 469 U.S. 325 (1985). A special need has been found not to exist where the primary aim was to detect evidence of ordinary criminal wrongdoing: *City of Indianapolis v Edmond* 531 U.S. 32, 44 (2000).
 27. *Samson v California*, 547 U.S. 843, 848 (2006).
 28. *Jones v Murray*, 962 F.2d 302 (4th Cir. 1992); *United States v Kimler*, 335 F.3d 1132 (10th Cir. 2003); *Groceman v U.S. Department of Justice*, 354 F.3d 411 (5th Cir. 2004); *Green v Berge*, 354 F.3d 675 (7th Cir. 2004); *United States v Kincade*, 379 F.3d 813 (9th Cir. 2004) cert. denied, 544 U.S. 924 (2005); *Nicholas v Goord* 430 F.3d 652 (2d Cir. 2005); *United States v Sczubelek*, 402 F.3d 175 (3rd Cir. 2005); *Padgett v Donald*, 401 F.3d 1273 (11th Cir. 2005), cert. denied, 546 U.S. 820, (2005); *Wilson v Collins*, 517 F.3d 421 (6th Cir. 2006); *United States v Conley*, 453 F.3d 674 (6th Cir. 2006); *United States v Hook*, 471 F.3d 766 (7th Cir. 2006); *United States v Kraklio*, 451 F.3d 922 (8th Cir. 2006); *United States v Weikert*, 504 F.3d 1 (1st Cir. 2007); *United States v Amerson*, 483 F.3d 73 (2d Cir. 2007); *United States v Kriesel*, 508 F.3d 941 (9th Cir. 2007); *United States v Banks*, 490 F.3d 1178 (10th Cir. 2007).
 29. *Anderson v Virginia*, 650 S.E.2d 702, 706 (Vir. 2006); *United States v Pool*, 645 F. Supp. 2d 903, 912 (2009); *Haskell and Ento v Brown*, 677 F. Supp. 2d 1187 (2009).
 30. *Friedman v Boucher and Luzaich*, 580 F.3d 847 (2009).
 31. A similar conclusion was reached in *United States v Mitchell*, 681 F. Supp. 2d 597 (2009).
 32. *Skinner v Railway Labor Executives' Association*, 489 U.S. 602 (1989).
 33. L.M. Harlan, "When Privacy Fails: Invoking A Property Paradigm to Mandate the Destruction of DNA Samples" (2004) 54 *Duke Law Journal* 179.
 34. *Haskell and Ento v Brown*, 677 F. Supp. 2d 1187, n.10 (2009).
 35. S. J. Carnahan, "The Supreme Court's Primary Purpose Test: A Roadblock to the National Law Enforcement DNA Database," (2004) 83 *Nebraska Law Review* 1 at 33.
 36. A. Ashworth, *Serious Crime, Human Rights and Criminal Procedure*, (London: Sweet & Maxwell, 2002).
 37. *Anderson v Virginia*, 650 S.E.2d 702, 706 (Vir. 2006); *United States v Pool*, 645 F. Supp. 2d 903, 909-912 (2009).
 38. Van der Velden, "The law", para.2; cf. *Kinnunen v Finland*, no. 24950/94, Commission decision, May 15, 1996.
 39. *S v United Kingdom* (2009) 48 E.H.R.R. 50 at [72].
 40. *United States v Mitchell*, 681 F. Supp. 2d 597, 609 (2009).
 41. <http://www.parliament.uk/documents/post/postpn258.pdf> [Accessed September 2, 2010].
 42. *S v United Kingdom* (2009) 48 E.H.R.R. 50 at [73]-[76].

43. House of Lords Constitution Committee, *Surveillance: Citizens and the State*, Volume I (HL Paper 18-I) (London: TSO, 2009) at [24].
44. *Kruslin v France* (1990) 12 E.H.R.R. 547 at [34].
45. *Klass v Germany* (1979-80) 2 E.H.R.R. 214 at [56].
46. *Leander v Sweden* (1987) 9 E.H.R.R. 433 at [49] and [59].
47. *Kruslin v France* (1990) 12 E.H.R.R. 547 at [34]-[35].
48. Parliamentary Office of Science and Technology, *Postnote: The National DNA Database*, No. 258 (2006), available at www.parliament.uk/documents/post/postpn258.pdf [Accessed September 2, 2010].
49. Criminal Procedure (Scotland) Act 1995 s.18.
50. Criminal Procedure (Scotland) Act 1995 s.18A(5).
51. *United States v Pool* 645 F. Supp. 2d 903, 909-912 (2009).
52. *S v United Kingdom* (2009) 48 E.H.R.R. 50 at [35].
53. Nuffield Council on Bioethics, *The Forensic Use of Bioinformation: Ethical Issues* (London: Nuffield Council on Bioethics, 2007) at [4.17] and [4.23].
54. Criminal Procedure (Scotland) Act 1995 s.18A(5).
55. Of course, the United Kingdom, by signing the ECHR treaty, vouched to guarantee to everyone within its jurisdiction the rights and freedoms defined in the Convention, and granted the ECtHR binding authority to decide cases on such matters. Where the law of a state which is party to an ECtHR case is found to be incompatible with the Convention, the nation must amend its national law to cohere with the decision (art.53).
56. See <http://libdems.org.uk/siteFiles/resources/PDF/Government/Nick-Clegg-New-Politics.pdf> [Accessed September 2, 2010].
57. *Van der Velden v The Netherlands*, no. 29514/05, December 7, 2006; *W v The Netherlands*, no. 20689/08, January 20, 2009.
58. *S v United Kingdom* (2009) 48 E.H.R.R. 50 at [89].
59. *S v United Kingdom* (2009) 48 E.H.R.R. 50 at [14].
60. *S v United Kingdom* (2009) 48 E.H.R.R. 50 at [122].
61. *United States v Pool*, 645 F. Supp. 2d 903, 915 (2009).
62. *United States v Mitchell*, 681 F. Supp. 2d 597 (2009).
63. *United States v Mitchell*, 681 F. Supp. 2d 597, 606 (2009).
64. *United States v Mitchell*, 681 F. Supp. 2d 597, 610 (2009).
65. F. McAuley and J.P. McCutcheon, *Criminal Liability: A Grammar* (Dublin: Roundhall, Sweet & Maxwell, 2000), p.34.
66. *Barberà, v Spain* (1989) 11 E.H.R.R. 360 at [77].
67. The Fifth Amendment states: "No person shall be held to answer for a capital, or otherwise infamous crime, unless on a presentment or indictment of a Grand Jury, except in cases arising in the land or naval forces, or in the Militia, when in actual service in time of War or public danger; nor shall any person be subject for the same offense to be twice put in jeopardy of life or limb; nor shall be compelled in any criminal case to be a witness against himself, nor be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation."
68. *Estelle v Williams*, 425 U.S. 501, 503 (1976).
69. *Coffin v United States*, 156 U.S. 432, 453 (1895).
70. A. Ashworth, "Four Threats to the Presumption of Innocence" (2006) 10 *International Journal of Evidence & Proof* 241 at 242.
71. Ú. Ní Raifeartaigh, "Reconciling Bail Law with the Presumption of Innocence" (1997) 17 *Oxford Journal of Legal Studies* 1 at 4.

- [72.](#) Ni Raifeartaigh at 5.
- [73.](#) Ashworth, "Four Threats to the Presumption of Innocence", (2006) 10 *International Journal of Evidence & Proof* 243.
- [74.](#) J.N. Mitchell, "Bail Reform and the Constitutionality of Pretrial Detention" (1969) 55 *Virginia Law Review* 1223 at 1231.
- [75.](#) *Bell v Wolfish*, 441 U.S. 520, 533 (1979). C.f. *Stack v Boyle*, 342 U.S. 1, 4 (1951): "This traditional right to freedom before conviction permits the unhampered preparation of a defense, and serves to prevent the infliction of punishment prior to conviction. ... Unless this right to bail before trial is preserved, the presumption of innocence, secured only after centuries of struggle, would lose its meaning."
- [76.](#) J. Thaler, "Punishing the Innocent: The Need for Due Process and the Presumption of Innocence Prior to Trial" [1978] *Wisconsin Law Review* 441 at 443.
- [77.](#) S. Trechsel, *Human Rights in Criminal Proceedings* (Oxford: Oxford University Press, 2005), p.164.
- [78.](#) Trechsel, *Human Rights in Criminal Proceedings*, at p.166.
- [79.](#) *Minelli v Switzerland* (1983) 5 E.H.R.R. 554 at [37]-[38].
- [80.](#) *Sekanina v Austria* (1994) 17 E.H.R.R. 221 at [29]. Also see *Asan Rushiti v Austria*, no. 28389/95, March 21, 2000.
- [81.](#) *Sekanina v Austria* (1994) 17 E.H.R.R. 221 at [30].
- [82.](#) *Englert and Nölckenbockhoff v Germany*, August 25, 1987, Series App. No. 123 [37]-[39].
- [83.](#) *Alletet de Ribemont v France* (1995) 20 E.H.R.R. 557 at [36].
- [84.](#) *Alletet de Ribemont v France* (1995) 20 E.H.R.R. 557 at [41].
- [85.](#) *S v United Kingdom* (2009) 48 E.H.R.R. 50 at [122].
- [86.](#) L. Laudan, "The Presumption of Innocence: Material or Probatory?" (2005) 11 *Legal Theory* 333 at 337-338.
- [87.](#) Bail Reform Act 1984, 18 U.S.C. § 3142 (f).
- [88.](#) Ashworth, "Four Threats to the Presumption of Innocence", (2006) 10 *International Journal of Evidence & Proof* 244.
- [89.](#) *W v Switzerland* (1994) 17 E.H.R.R. 60; *Labita v Italy*, No. 26772/95, April 6, 2000; *Smirnova v Russia* (2003) 39 E.H.R.R. 450.
- [90.](#) *S v United Kingdom* (2009) 48 E.H.R.R. 50 at [94].
- [91.](#) *S v United Kingdom* (2009) 48 E.H.R.R. 50 at [73]-[76].
- [92.](#) *S v United Kingdom* (2009) 48 E.H.R.R. 50 at [122].
- [93.](#) *S v United Kingdom* (2009) 48 E.H.R.R. 50 at [122].
- [94.](#) Despite my concern about the appropriateness of this term I have adopted it, following the Grand Chamber (*S v United Kingdom* (2009) 48 E.H.R.R. 50 at [122]).
- [95.](#) Space precludes me from fully developing stigma as a free-standing argument.
- [96.](#) *S v United Kingdom* (2009) 48 E.H.R.R. 50 at [94].
- [97.](#) *S v United Kingdom* (2009) 48 E.H.R.R. 50 at [122].
- [98.](#) Indeed, this argument was dismissed in *Van der Velden* on the basis that he was not treated any differently from other persons convicted of comparably serious offences. In *S v United Kingdom* the ECtHR did not consider it necessary to examine separately the applicants' complaint under art.14 given the conclusion reached in relation to art.8. Similarly, *Boling v Romer* 101 F.3d 1336, 1341 (10th Cir. 1996) held that DNA sampling from certain offenders is not in breach of the prohibition on discrimination. It appears that such argument has not been used in a reported case in relation to the storage of arrestees' DNA in the United States.
- [99.](#) See H. Becker, *Outsiders: Studies In The Sociology Of Deviance*, (New York: Free Press, 1963); E. Lemert, *Human Deviance, Social Problems and Social Control* (Englewood Cliffs, NJ: Prentice-Hall, 1967).
- [100.](#) V. Tadros, "Rethinking the Presumption of Innocence", (2007) 1 *Criminal Law and Philosophy* 193-213.
- [101.](#) G. Letsas, *A Theory of Interpretation of the European Convention on Human Rights* (Oxford: Oxford University Press, 2007).

- [102.](#) P. Kelly, *Liberalism* (2005), p.66.
- [103.](#) I. Berlin, *Two Concepts of Liberty* (Oxford: Clarendon Press, 1958); J.S. Mill, *On Liberty and Other Essays* (Oxford: Oxford University Press, 1991).
- [104.](#) S.A. Cole & M. Lynch, "The social creation of suspects" (2006) 2 *Annual Review of Law and Social Science* 39 at 44.
- [105.](#) R. Dworkin, *Taking Rights Seriously* (Harvard University Press, 1977), p.xi.
- [106.](#) D. Kaye and M. Smith, "DNA Databases for Law Enforcement: The Coverage Question and the Case for a Population-Wide Database", in Lazer, *DNA and the criminal justice system: The Technology of Justice* (Cambridge, MA: MIT. Press, 2004), p.225.
- [107.](#) S. Sedley, "Short Cuts" (2005) 27(2) *London Review of Books* 24-25.

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